

B. Sc (CS) -InternshipEmbedded
Scheme of Instruction and Detailed Syllabus
(Effective from Academic Year 2024)

Scheme of Instruction

Duration: 6 Semesters (3 Years)

First Semester								
Sl No	Paper Code	Title of the Paper	CC/H C/ SC/F C	Credits	IA	Exam	Total	TeachingHours /week
1	24B KNT101	Language: Kannada-I	CC	3	40	60	100	3
2	24B HNT102	Language: Hindi-I	CC	3	40	60	100	3
3	24B ENT103	Language: English-I	CC	3	40	60	100	3
4	24B FET104	Functional English-I	CC	3	40	60	100	3
5	24B CST105	Computer Science-I (C programming)	HC	3	40	60	100	3
6	24B CST106	Computer Science-II (Digital computer organization)	HC	3	40	60	100	3
7	24B CST107	Computer Science-III (Computer networks)	HC	3	40	60	100	3
8	24B PET108	Energy Sources	OE	2	20	30	50	2
9	24B CET109	Chemistry-I	OE	2	20	30	50	2
10	24B MET110	Optional Mathematics-I	OE	2	20	30	50	2
11	24B EST111	Environmental Studies	FC	2	20	30	50	2
		Practicals						
12	24B CSP101	Computer Science Practical-I (C Programming lab)	HC	2	20	30	50	3
13	24B CSP102	Computer Science Practical-II (office automation and HTML tags)	HC	2	20	30	50	3
14	24B CSP103	Computer Science Practical-III (Network and data-base management)	HC	2	20	30	50	3
Total Credits				25			800	26

Second Semester								
Sl No	Paper Code	Title of the Paper	CC/HC/SC/FC	Credits	IA	Exam	Total	Teaching Hours /week
1	24B KNT201	Language: Kannada-II	CC	3	40	60	100	3
2	24B HNT202	Language: Hindi-II	CC	3	40	60	100	3
3	24B ENT203	Language: English-II	CC	3	40	60	100	3
4	24B ENT204	Functional English-II	CC	3	40	60	100	3
5	24B CST205	Computer Science-IV (C++ programming)	HC	3	40	60	100	3
6	24B CST206	Computer Science-V (Data structures)	HC	3	40	60	100	3
7	24B CST207	Computer Science-VI (Python Programming)	HC	3	40	60	100	3
8	24B PET208	Astrophysics	OE	2	20	30	50	2
9	24B CET209	Chemistry-II	OE	2	20	30	50	2
10	24B MET210	Optional Mathematics-II	OE	2	20	30	50	2
		Practicals						
11	24B CSP201	Computer Science Practical-IV (C++ Programming lab)	HC	2	20	30	50	3
12	24B CSP202	Computer Science Practical-V (Data structures using C++)	HC	2	20	30	50	3
13	24B CSP203	Computer Science Practical-VI (Getting started with python)	HC	2	20	30	50	3
Total Credits				23			700	24

Third Semester								
Sl No	Paper Code	Title of the Paper	CC/HC/SC/FC	Credits	IA	Exam	Total	Teaching Hours /week
1	24B KNT301	Language: Kannada-III	CC	3	40	60	100	3
2	24B HNT302	Language: Hindi-III	CC	3	40	60	100	3
3	24B ENT303	Language: English-III	CC	3	40	60	100	3
4	24B ENT304	Functional English-III	CC	3	40	60	100	3
5	24BCST305	Computer Science-VII (Java programming)	HC	3	40	60	100	3
6	24BCST306	Computer Science-VIII (Advanced DBMS)	HC	3	40	60	100	3
7	24BCST307	Computer Science-IX (Artificial intelligence)	HC	3	40	60	100	3
8	24BICT308	Indian Constitution	FC	2	20	30	50	2
		Practicals						
9	24B CSP301	Computer Science Practical-VII (Java lab)	HC	2	20	30	50	3
10	24B CSP302	Computer Science Practical-VIII (Advanced DBMS lab)	HC	2	20	30	50	3
11	24B CSP303	Computer Science Practical-IX (AI lab)	HC	2	20	30	50	3
Total Credits				23			700	26

Fourth Semester								
Sl No	Paper Code	Title of the Paper	CC/HC/SC/FC	Credits	IA	Exam	Total	Teaching Hours /week
1	24B KNT401	Language: Kannada-IV	CC	3	40	60	100	3
2	24B HNT402	Language: Hindi-IV	CC	3	40	60	100	3
3	24B ENT403	Language: English-IV	CC	3	40	60	100	3
4	24B ENT404	Functional English-IV	CC	3	40	60	100	3
5	24B CST405	Computer Science-X (C# and .Net technologies)	HC	3	40	60	100	3
6	24B CST406	Computer Science-XI (Specialized Web Development)	HC	3	40	60	100	3
7	24B CST407	Computer Science-XII (Multimedia Animation)	HC	3	40	60	100	3
8	24BSTT408	Soft Skill Training	FC	2	20	30	50	2
		Practicals						
9	24B CSP401	Computer Science Practical-X (C# and .Net technologies lab)	HC	2	20	30	50	3
10	24B CSP402	Computer Science Practical-XI (Specialized Web Development lab)	HC	2	20	30	50	3
11	24B CSP403	Computer Science Practical-XII (Multimedia Animation lab)	HC	2	20	30	50	3
Total Credits				23			700	26

Fifth Semester								
Sl No	Paper Code	Title of the Paper	CC/H C/ SC/F C	Credits	IA	Exam	Total	Teaching Hours /week
5	24B CST501	Computer Science-XIII (Machine Learning)	HC	3	40	60	100	3
6	24B CST502	Computer Science-XIV (Analysis and design of Algorithm)	HC	3	40	60	100	3
7	24B CST503	Computer Science-XV (Mobile Application Programming)	HC	3	40	60	100	3
8	25BIST504	Indian Knowledge System (IKS)	FC	2	20	30	50	2
		Practicals						
9	24B CSP507	Computer Science Practical-XIII	HC	2	20	30	50	3
10	24B CSP508	Computer Science Practical-XIV	HC	2	20	30	50	3
11	24B CSP509	Computer Science Practical-XV	HC	2	20	30	50	3
Total Credits				17			500	20

Sixth Semester								
Sl No	Paper Code	Title of the Paper	CC/H C/ SC/ FC	Credits	IA	Exam	Total	Teaching Hours /week
1	24B CST601	Computer Science-XVI (User Interface Design)	HC	3	40	60	100	3
2	24B CST602	Computer Science-XVII (Cyber Security)	HC	3	40	60	100	3
3	24B CST603	Computer Science-XVIII (Industry Oriented Software Development and DevOps Practices)	HC	3	40	60	100	3
4	24BRPP604	Research Project	HC	8	80	120	200	8
Total Credits				17			500	17

